## A NEW SPECIES OF EUPARYPHUS FROM MICHIGAN (DIPTERA, STRATIOMYIDAE).

By George Steyskal, Detroit, Mich.

## Euparyphus (Caloparyphus) adaleonora n. sp.

Belongs in the group of James' recently erected (Pan-Pacific Ent., 15: 49, 1939) subgenus *Caloparyphus* containing *amplus*, *currani*, *crucigerus* and *tahoensis*, although it also resembles *major*.

Female: Head black, with the following areas yellow: lower half of the posterior orbits and a spot at the upper end of the same: a stripe on the sides of the face and front, widest below, where it is a little wider than the width of the antennae, separating from the eyes a little on the front to end a short distance below the level of the lower ocellus; a very small spot at each side of the base of the antennae. The very narrow cheeks are black, as also the mouth parts, except the labellae. Very fine shining white tomentum (pruinosity) is present on the yellow portion of the lower posterior orbits and on the proximal half of the width of the yellow facial orbits. The upper two-thirds of the portion of the front between the yellow stripes is strongly longitudinally wrinkled; the lower third is smooth and polished. The antennae are wholly black, as long as the head, the respective lengths of the segments, from base outward .2, .2, .27, .17, .16, .23, .13, .4 mm., the last three segments concave on the outer side. The eyes are bare. Thorax black, the following areas yellow: a pair of dorsal wedge-shaped spots on the anterior half of the presutural area; sublateral vittae in front of the suture, connected with the pale humeri; the postalar calli: a spot on the mesopleura extending narrowly along the notopleural suture almost to the humeri; a spot at the top of the sternopleura; scutellum, except base of sides and a line at base beneath. The scutellar spines are yellow with dark tips, and are separated by slightly more than their length. Halteres vellow, their stems somewhat infuscated. Squamae blackish with pale fringes. Wings hyaline, veins yellow, vein R4 wanting, posterior veins not reaching wing margin, and the first posterior reduced to a fold beyond its base. Legs vellow, the femora black except the tips; a brown annulus in center of hind tibiae; the third and fourth tarsal joints, especially on front legs, brown to black. Abdomen black, with a forwardly arcuate yellow band on third segment, starting in posterior corners of the segment, about as wide as half the length of the segment.

interrupted in the middle by less than the greatest width of the band, and on each side of the interruption with a round knob preceded by a constriction. There are narrower oblique yellow stripes starting in the posterior corners of the fourth segment extending about halfway to the middle, and there is a broad triangle of yellow in the center of the apex of the fifth segment extending more than two-thirds the distance to the anterior margin of the segment. The venter is black with small yellow spots in the center of the second, third and fourth segments and the apex of the fifth segment is a little pitchy. The pile is everywhere rather sparse, short and white, longest on parts of the pleura. Length, 8 mm.

Holotype, female, Loon Lake, McCarty Creek, Lake County, Michigan, August 3, 1934 (A. L. Olson—L. K. Gloyd), in Univ. Mich. Mus. Zool. A number, 33, on the label refers to the following passage in the collectors' notebook. "Lake Co. McCarty Creek. About 5½ mi. S.E. of Loon Lake. Shallow spring-fed cold swift stream from 8 to 15 ft. in width. Banks of creek wet with seepage from springs. Sand and gravel bottom. Open, rather barren hill sloped to creek, covered sparsely with grass, very few shrubs, thistles. Only a few large trees on hill. Had once been cleared for a farm home, but was entirely abandoned, with no buildings left standing." Miss Olson says that she and Mrs. Gloyd had driven through rather dense woods to reach this locality.

It may be remarked that this represents apparently the first record of the subgenus *Caloparyphus* east of the Mississippi River.

## SOME NOTEWORTHY MISSOURI BUTTERFLIES: PAPILIO TROILUS L. AB. RADIATUS STKR. AND A VARIATION OF LYCAENOPSIS PSEUDARGIOLUS (BDV. & LEC.) (LEPIDOPTERA, PAPILIONIDAE AND LYCAENIDAE).

By HAROLD I. O'BYRNE, Webster Groves, Missouri.

The aberrant form of *Papilio troilus* Linn. named *radiatus* by Strecker (Lep. Rhop. Het., suppl. 3, p. 17, 1900) differs from normally colored individuals of *troilus* in having the pale submarginal spots above and the outer row of orange spots below enlarged and pointed inwardly, encroaching upon the greenish-gray (male) or blue (female) area of the hind wings above and more or less com-